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Remarks/arguments:

This amendment is in response to the FINAL office action of July 26, 2005. By the present amendment claim 1 has been amended to set forth the function of the fan in a "means for" format, and to change the term "transverse" to --at right angles--. In addition, the phrase "installed in" has been changed to --mounted within-- to use the same terminology as used earlier in the claim. Since the housing is a hand-held housing, the hand grip, which had previously been set forth in dependent claims 5 and 19 has been added to the claim. No other changes have been made at this time. In addition, dependent claims 3, 5, and 19 have amended to improve their form.

The purpose of having the fan mounted within the housing and with its flow at right angles to the optical axis is so that the flow of air may efficiently be directed from one side of the polymerization device to the other, and also so that neither the patient or the dentist using this device will have air blown at him, this function being set forth in the phrase "for creating a flow of cooling air which moves along a path generally transverse to the optical axis (76) of the light source (14)". If the blower were mounted so that the flow was along the optical axis, discharged air would either impact the dentist or the patient during operation of the device of this invention. With this invention, both suction air and blowing air are essentially completely prevented from touching the patient and the dentist by having the air move in a direction that is at right angles to the optical axis. There is no teaching in the cited prior art documents of this. In addition, this feature is not taught by new discovered US 4,298,806.

The examiner has rejected claims 1 and 3 as fully met by German patent 34 11 996. However, it is respectfully submitted that this reference does not show the features set forth in claim 1. More particularly, this reference does not teach the combination of a housing, a light source and an axial fan mounted within the housing, the rotational axis of the fan being at right angles to the optical axis (76) for creating a flow of cooling air which moves along a path generally transverse to the optical axis (76) of the light source (14). Clearly the German reference does not teach these features. His fan is mounted in the handle base and is at a 45° degree angle to his optical axis as shown in FIG. 5, or at a 30° degree angle as shown in FIG. 1. US 4,298,806 shows an angle in the 75-80° range. Clearly these angles would not dispose the rotational axis of his fan "at right angles to the optical axis". Claim 3, which depends from claim 1, further adds that the housing (12) has at least one air intake opening on a first side of the optical axis and at least one air exhaust opening (28) on a

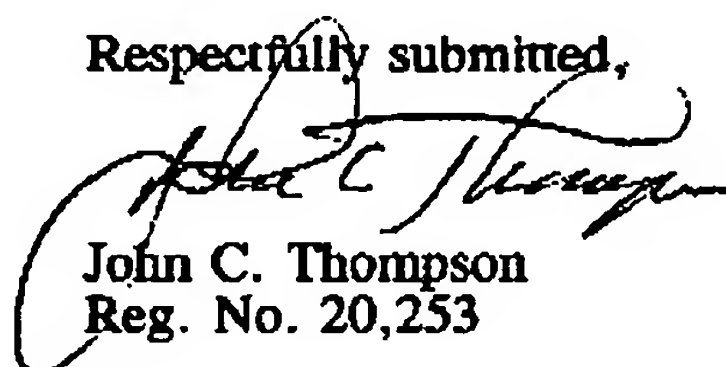
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second side of the optical axis substantially opposed to the first side on which the air intake opening is located. These additional features are also not taught by the German reference or by US 4,. Accordingly, the examiner is respectfully requested to withdraw the rejection of claims 1 & 3 as fully met by German 3411996.

The examiner next rejects claims 1, 2, and 5-19 as unpatentable over the combination of Lienhard and Shikamo et al. While Shikamo et al discloses a light polymerization device for polymerizing dental material, comprising a housing, and a light source and a fan mounted within the housing, he does not disclose a fan "means for creating a flow of cooling air which moves along a path generally transverse to the optical axis (76) of the light source (14)", or a housing with the intake and exhaust openings in the housing as required by claim 3. Thus the fan of Shikamo et al may at times blow air directly into the dentists face if he is not careful to avoid the air discharge shown by the arrows in FIG. 2. The Lienhard device, which is a pioneer patent in the field, does not have a fan in the housing which carries the light. In order to cool his device, Lienhard provides a separate base with a fan, and the light device may be placed on the base to cool it down. To add a fan to Lienhard would be contrary to his teachings. As the examiner knows, in order to establish a prima facie case of obviousness, there must be some suggestion or motivation in the references or the knowledge of the art generally to modify or combine the references, MPEP 2143,01. The examiner has not established such a prima facie case. Accordingly, the examiner is respectfully requested to withdraw this grounds of rejection.

In that all of the claims are deemed to be allowable for the reasons set forth above, the allowance of this application is respectfully requested in the absence of more relevant prior art.

Respectfully submitted,



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